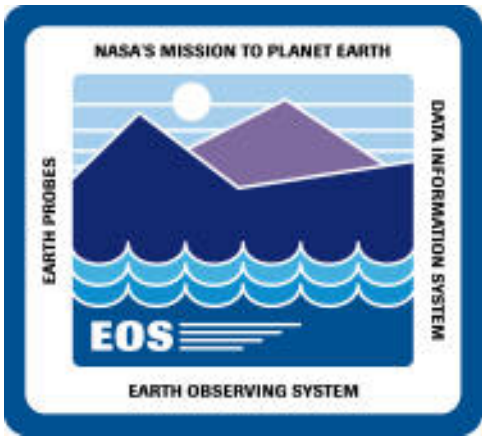


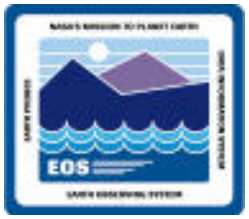
Request Partitioning

Michael Burnett

mburnett@eos.hitc.com

14 June 1996

Request Partitioning Purpose

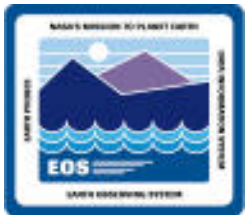


- **Sequencing of granules within a request**
- **Minimizing delay in request fulfillment**
- **Prevent resource flooding**

Design Topics Addressed

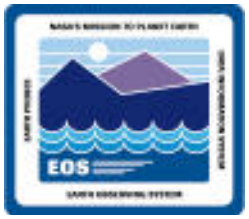
- **CDR RID #6**
  - **Location of product request handling (e.g. segmentation in the system)**

Request Partitioning Component Roles



- Client
  - Declares sequencing of granules
  - Supports re-sorting results sets
  - Uses SDSRV Client Request object to establish domain
- SDSRV
  - Ensures files are available
    - •Virtual Products
    - •On-Demand Production
  - Resource control at thread/active request level
- DDIST
  - Control for large volume requests
    - # files
    - # media volumes (disk space for network resources)

Request Partitioning
SDSRV Support



Support of availability

- **ESDT granules are aware of file availability**
- **Time estimates for file availability**
- **“Holding” request for unavailable granules**

Configuration

- **DAAC configurable parameter for maximum wait**
  - **PLS provided for ODPR**
  - **Metadata for virtual (future) granules**

Operations GUI

- **GUI for partitioning actions**

Support of sequencing

- **Sequencing preserved, when granules available**

Request Partitioning Operations Control

Send & Hold

- Partition Request
- Send Ready to DDIST
- Create Subscription for remainder of granules
- Update Order Tracking

Send & Drop

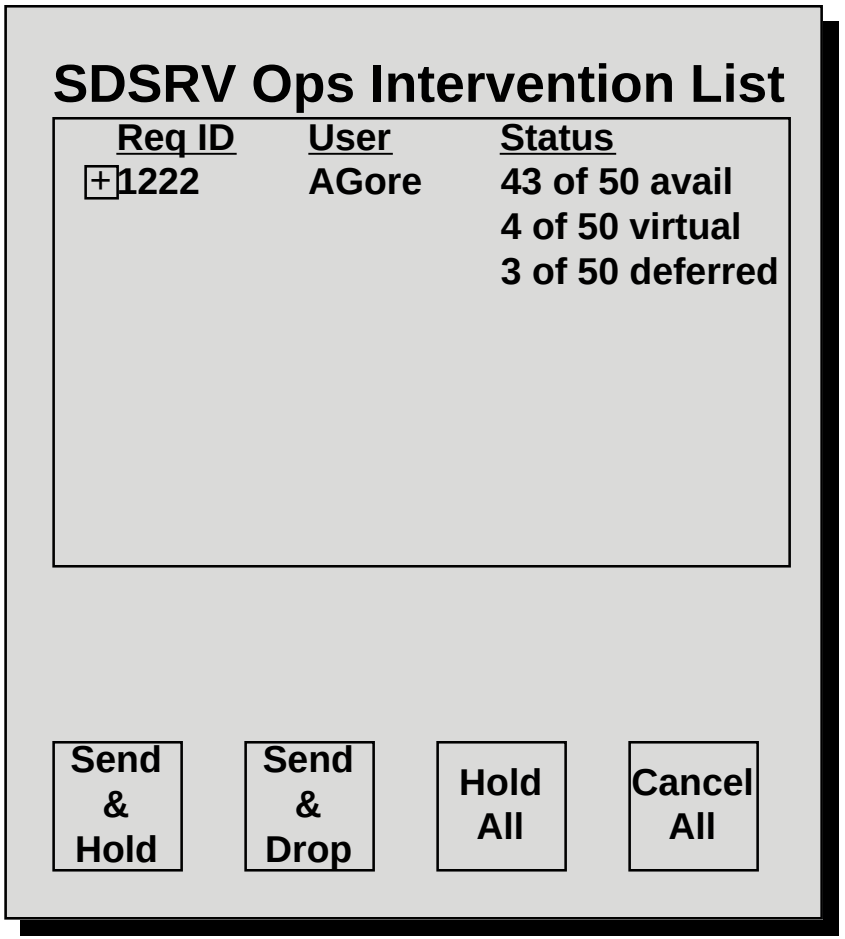
- Partition Request
- Send Ready to DDIST
- Remainder not distributed
- Update Order Tracking

Hold All

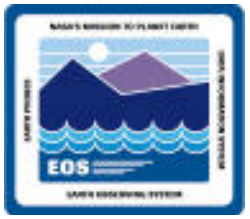
- Wait until all granules are ready

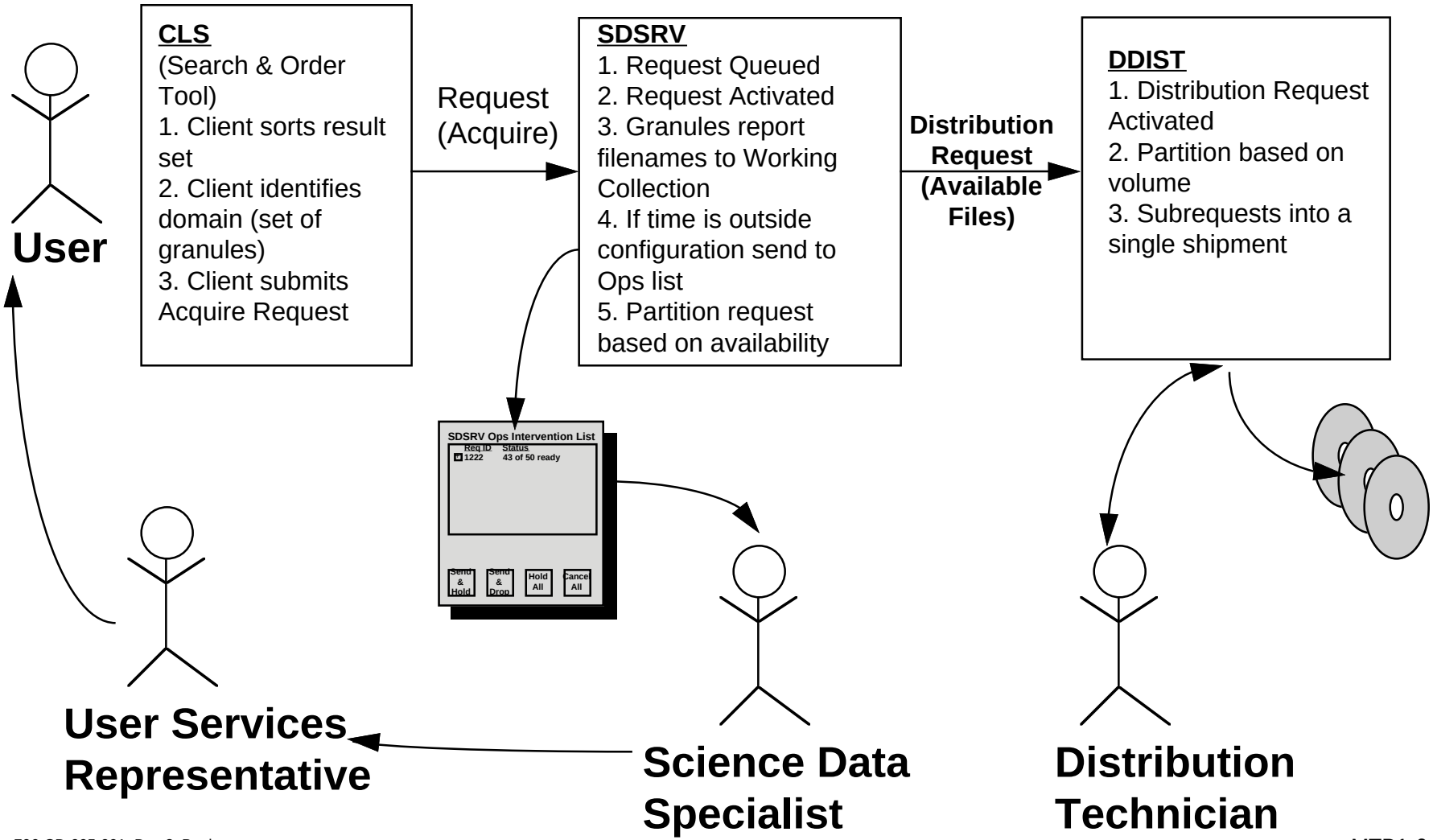
Send & Hold

- Cancel entire request



Request Partitioning Scenario Activity





Operator Summary

Where's My Data??

Customer

I'll find out!

User Services

Order Tracking GUI

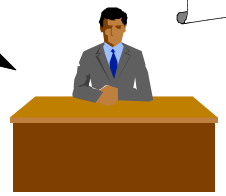
Status

Not Available?

Science Data Specialist

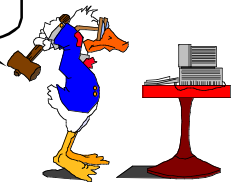
Request Partitioning

Order Tracking



Archive Manager

No Errors!



Production Planner

Reprocessing Request

Partially Filled Order

Segmentation

In the Mail.

Distribution Tech